

**Work Order ID 68308**

Monday, April 11, 2011 1:23:36 PM



Page 1

Item ID: D3186-4

Accept



Setup Start



Revision ID:

Stop



Item Name: Spacepod Door, RH

Start Date: 4/11/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/6/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start

Approvals: Process Plan: C2 Date: 11/04/11 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3186	Rev E								

100

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

1-Trim door to fit spacepod before drill holes and cut out slots for latch as per  
dwg D3186 (D3186-4 detail)

110

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

120

0.00



Identify as per dwg &amp; Stock Location: \_\_\_\_\_

Packaging

Memo

0.00

Packaging

N/A - customer  
fly door no holes/no trim  
11/05/10  
8 11/5/10

11/5/10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 68308**

Monday, April 11, 2011 1:23:36 PM



Page 2

Item ID: D3186-4

Accept



Setup Start



Revision ID:

Stop



Item Name: Spacepod Door, RH

Start Date: 4/11/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/6/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/10

MFC  
11-5-10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

**NOTE:** Date & initial all entries

# Picklist Print

Monday, April 11, 2011 1:23:32 PM

Page 1

Work Order ID: 68308



Parent Item: D3186-4



Parent Item Name: Spacepod Door, RH

Start Date: 4/11/2011

Required Date: 5/6/2011

Start Qty: 1.00

Required Qty: 1.00


**Comments:**

IPP Rev:A New Issue 07-01-11 EC

IPP rev.B revD 07.03.07 ec

IPP Rev:C

10-08-11 added trim door before drilling DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3186-2M <i>P2m</i>  SPACEPOD DOOR RH		Manufactured	No			100	Each	0.0000	1	1			



*68309 MF*

*11-05-10*

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

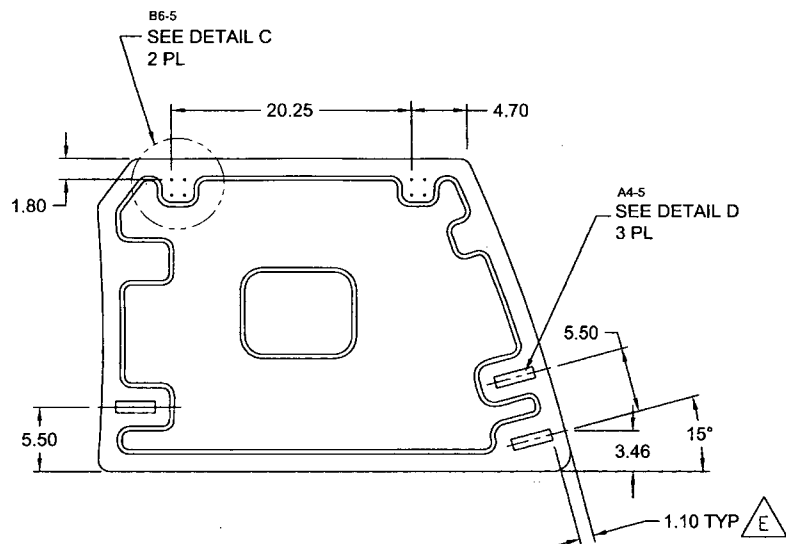
8 7 6 5 4 3 2 1

D

C

B

A

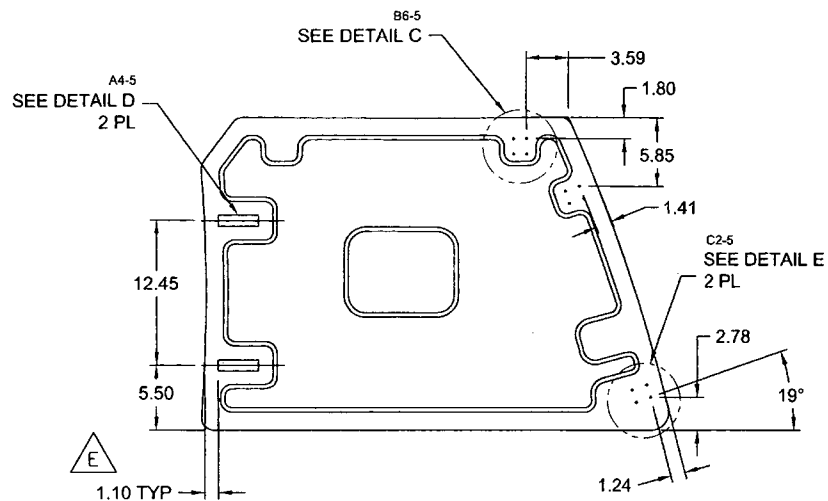


**D3186-1 SPACEPOD DOOR, LH**  
MAKE FROM D3186-1M

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

0211104111  
W 10:68308



**D3186-3 SPACEPOD DOOR, LH**  
MAKE FROM D3186-1M

**RELEASED**  
2009-09-09

E	DRAWING UPDATED TO CURRENT STANDARDS. 1.10 WAS 0.98 (ZN B5-1, B4-1, B7-2, B1-2); R0.12 WAS 0.125 (ZN B5-5); REF PAR 09-026	RF	09.07.08
D	UPDATE DIMENSIONS	LE	07.02.22
C	REMOVED D0600-XXX LABELS	LE	06.12.13
B	DIMS UPDATED TO MATCH PRODUCT FOAM PATTERN UPDATED D3186-1M/-2M/-3/-4 ADDED	LE	06.09.25
A	NEW ISSUE	CP	03.03.27
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF	DRAWING NO. REV. E	
DATE	09.07.08	D3186 SHEET 1 OF 5	
		TITLE SCALE	
		SPACEPOD DOOR NTS	
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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

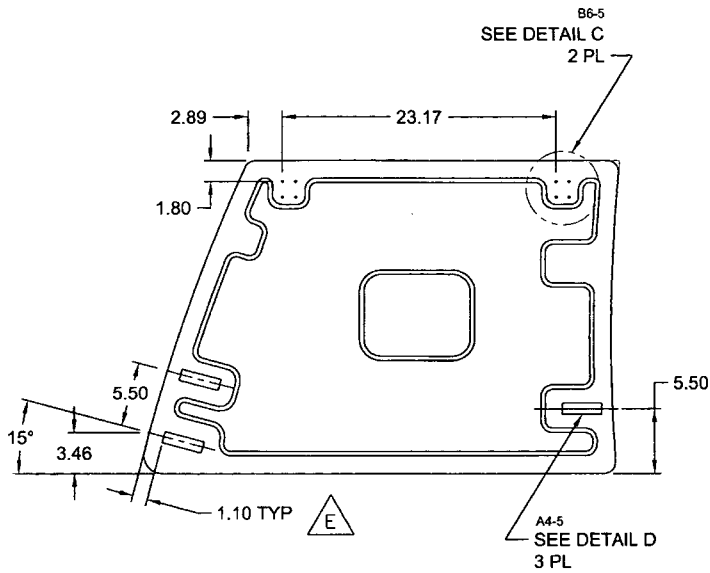
**NOTE:** Date & initial all entries



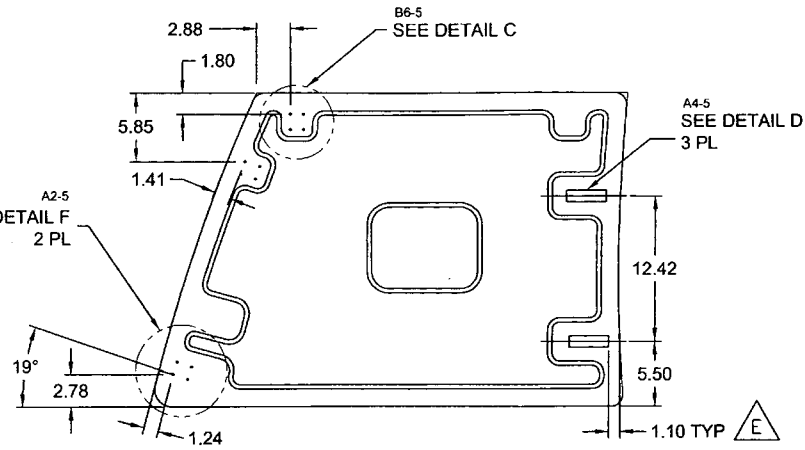
8 7 6 5 4 3 2 1

D  
C  
B  
A

D  
C  
B  
A



**D3186-2 SPACEPOD DOOR, RH**  
MAKE FROM D3186-2M



**D3186-4 SPACEPOD DOOR, RH**  
MAKE FROM D3186-2M

- NOTES:  
 1) MATERIAL: N/A  
 2) FINISH: N/A  
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
 4) UNITS: INCHES UNLESS OTHERWISE NOTED  
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
 6) IDENTIFICATION: NONE  
 7) WEIGHT: N/A

WID: 68308

**RELEASED**  
2008-09-09

DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	W	DRAWING NO.	REV. E
MFG. APPR.	W	D3186	SHEET 2 OF 5
APPROVED	W	TITLE	SCALE
DE APPR.	W	SPACEPOD DOOR	NTS
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

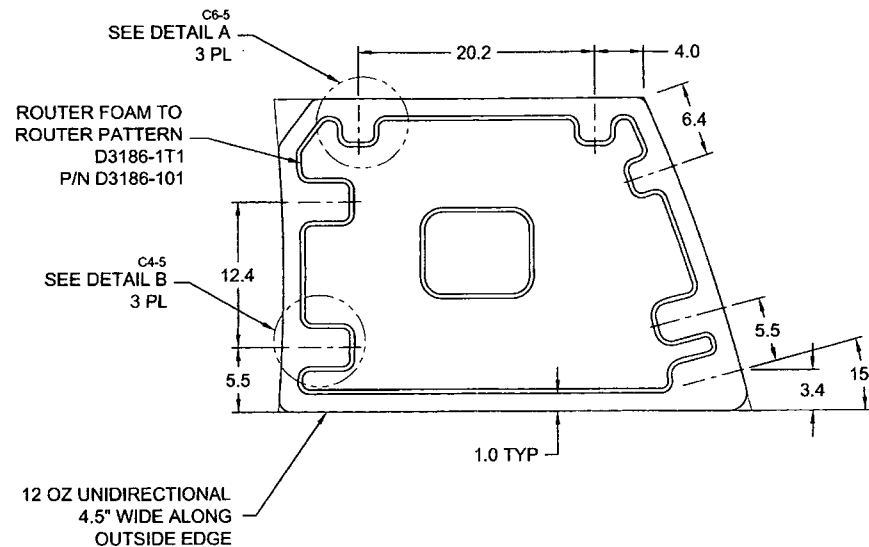
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

**NOTE:** Date & initial all entries

# MAIN LAYUP

9 OZ SATIN (9 SQ FEET)  
 9 OZ SATIN (9 SQ FEET)  
 FOAM  
 9 OZ SATIN (9 SQ FEET)  
 12 OZ UNIDIRECTIONAL  
 9 OZ SATIN (9 SQ FEET)  
 RESIN (35-45% BY WEIGHT)  
 PEEL PLY



**D3186-1M SPACEPOD DOOR AS MOLDED**

## NOTES:

### 1) MATERIAL:

RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40  
 FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL  
 FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")  
 12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")  
 LAMINATE PER DART QSI 006 4.0  
 LAMINATION SCHEDULE PER THIS DRAWING

2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 7.0 lbs

8) USE MOLD DT8005 FOR DOOR LAYUP

**RELEASED**  
 2009-08-08

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D3186	SHEET 3 OF 5
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	SPACEPOD DOOR	NTS
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W10.68309

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

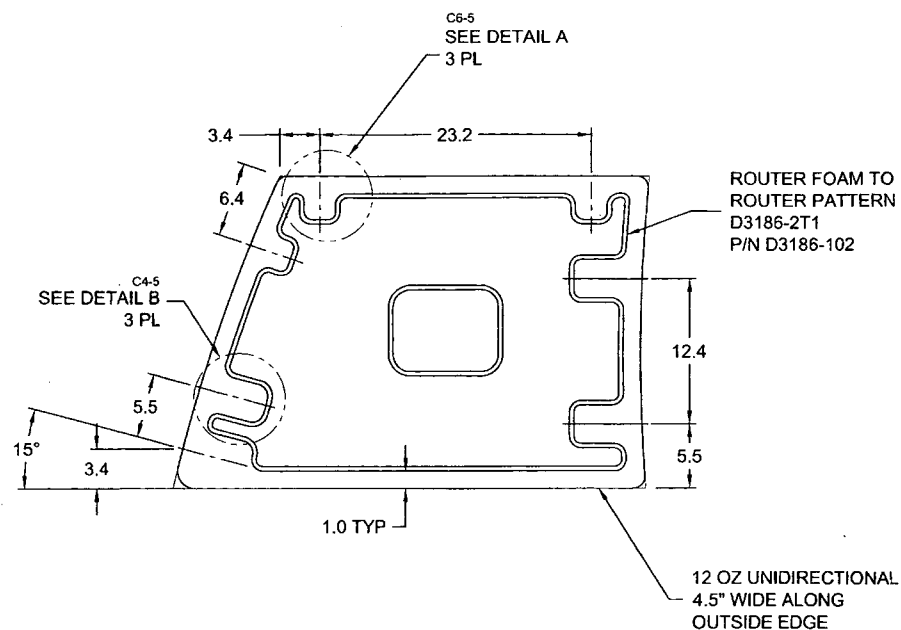
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

9 OZ SATIN (9 SQ FEET)  
9 OZ SATIN (9 SQ FEET)  
FOAM  
9 OZ SATIN (9 SQ FEET)  
12 OZ UNIDIRECTIONAL  
9 OZ SATIN (9 SQ FEET)  
RESIN (35-45% BY WEIGHT)  
PEEL PLY



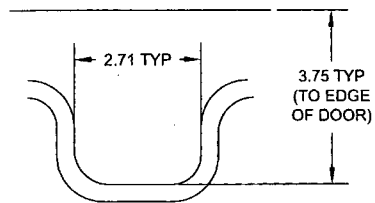
NOTES:  
1) MATERIAL:

- RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40  
FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECCELL  
FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")  
12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")  
LAMINATE PER DART QSI 006 4.0  
LAMINATION SCHEDULE PER THIS DRAWING`
- 2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 7.0 lbs
  - 8) USE MOLD DT8006 FOR DOOR LAYOUT

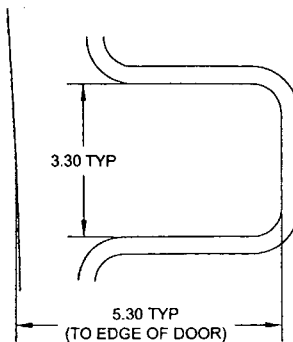
**D3186-2M SPACEPOD DOOR AS MOLDED**

RELEASED  
2009-09-09

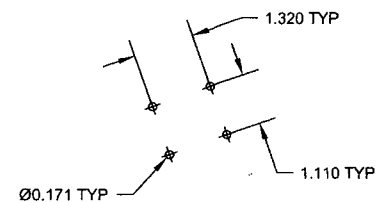
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DRAWN	RF	<b>HAWKESBURY, ONTARIO, CANADA</b>	
CHECKED	CP	DRAWING NO.	REV. #
MFG. APPR.	<i>[Signature]</i>	D3186	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SPACEPOD DOOR	NT
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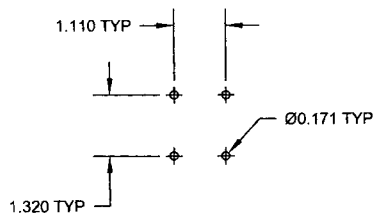
**DETAIL A** D6-3  
SCALE 4X D4-4



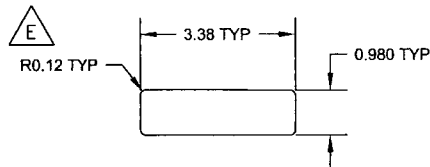
**DETAIL B** C6-3  
SCALE 4X C6-4



**DETAIL E** C1-1  
SCALE 4X

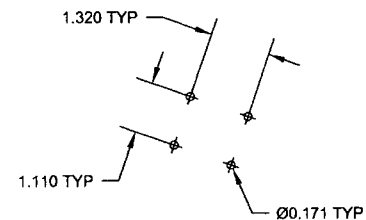


**DETAIL C** D7-1  
SCALE 4X D3-1  
D6-2  
D3-2



NOTE: ENSURE THAT CUTOUT IS PERPENDICULAR TO EDGE OF DOOR

**DETAIL D** C5-1  
SCALE 4X D4-1  
B6-2  
C2-2



**DETAIL F** C4-2  
SCALE 4X

**RELEASED**  
2009-09-09

W10:68303

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 5 OF 5
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DE APPR.		SPACEPOD DOOR	NTS
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